

Work Order ID 152248

Friday, October 21, 2016 3:03:00 PM

152248

Page 1

Item ID: D4407-041 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Bar Weldment
 Start Date: 10/18/2016 Start Qty: 6.00 ***6*** Cust Item ID:
 Required Date: 10/25/2016 Req'd Qty: 6.00 ***6*** Customer:
 Reference:

12/18/16

Approvals: Process Plan: DAS Date: OCT 26 2016 Tooling: Date: Run Start ***NR1***
 QC: 21 Date: SPC (Y/N): Date: Stop ***NR2***
9-89

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D4407	D								

100 0.00
100
 Cold Saw
 Hyd Mech
 Memo
 Cut blanks at 66.75"
 (EXTRA MATL WILL BE TRIM OFF AT D4406-041 ASSY)

12 Q.L 17-02-14

110 Weld per dwg & QSI004 4.5 0.00
110
 autoweld 1
 Automated Welding 1
 Memo
 SEE NOTE 8 FOR SURFACE BUILDUP
 1- WELD AS PER DWG AND QSI004 4.5
 FOR AUTOMATED WELDING USE 8259 HARDCOAT
 BATCH: M135695

12 Q.L/EZ 17-02-14

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Description Work Order Deviation		Disposition			

Root Cause	FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : ☐				

DQA: _____ Date: _____



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Page 3

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Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
150	QC21- Final Inspection - Work Order Release	0.00							
150									
QC	Memo	0.10							
Quality Control									

DAS
21
9-89

MAR 03 2017

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

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Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																													
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Misidentified ☐	Past Due ☐																																																																

Picklist Print

Friday, October 21, 2016 3:02:59 PM

Page 1

Work Order ID: 152248

152248

Parent Item: D4407-041

D4407-041

Parent Item Name: Bar Weldment

Start Date: 10/18/2016

Required Date: 10/25/2016

Start Qty: 6.00

Required Qty: 6.00

Comments: IPP REV:A 15.11.16 NEW ISSUE DD VERF:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M304B0.250x0.500		Purchased					f	243.6790		35.11579			

M304B0 250x0 500

304 BAR .250 x .500

Q.L 17-02-18

Location

Loc Qty

Loc Code

WA002

243.679

134172

6

m133596

38.948

m133923

1.85

m134526

1.048

m135822

195.833

M136163

39,55

* M136771

36,75

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

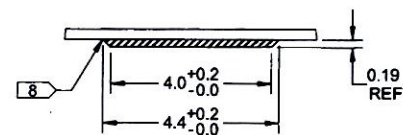
Work Order update only ☐

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OTHER : _____					

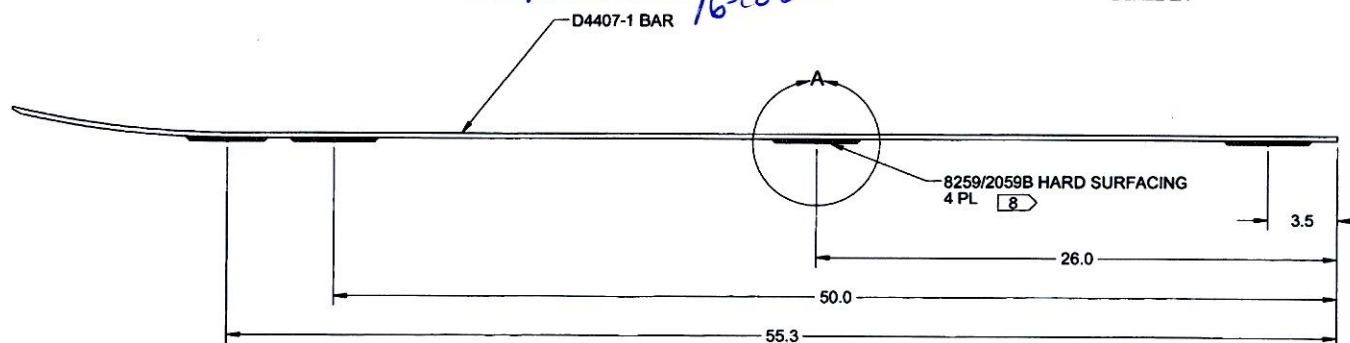
ITEM	QTY	P/N	DESCRIPTION
	X	D4407-041	BAR WELDMENT
1	1	D4407-1	BAR
2	A/R	8259/2059B	HARD SURFACING

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER

NO. 152248 ML5
16-10-26



DETAIL A Δ
4 PL
SCALE 2X



D4407-041 BAR WELDMENT Δ

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 2.88 lbs
- 8) BUILDUP HARD SURFACING 0.18 - 0.20 THICK USING 8259 ROD PER QSI 004 SECTION 4.5 (AUTOMATED WELDING) OR BUILDUP HARD SURFACING 0.19 - 0.25 THICK USING 2059B ROD PER QSI 004 SECTION 4.1 (MANUAL WELDING)

D	ADD D4407-041/-043 WELDMENTS, RE-DESIGN D4407-1/-3, ADD NOTE 8 (SH 1.2 AUTOMATED WELDING), DELETE NOTE 8 (SH 3&4)	DB	15.10.13
C	REDESIGNED WITH SHORTER CUTS, NOTE 8 ADDED. B4-2, B4-3 0.18 WAS 0.13 (REF NCR12-2031)	AJS	13.03.11
B	REMOVE TOOLING HOLES FOR -1/-3; RE-DESIGN D4407-3	RF	12.01.30
A	NEW ISSUE	RF	11.08.15
REV.	DESCRIPTION	BY	DATE
DESIGN	RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	DB		
CHECKED	ML	DRAWING NO.	REV. D
MFG. APPR.	DD	D4407	SHEET 1 OF 4
APPROVED	WM	TITLE	SCALE
DE APPR.	DS	BAR	NTS
DATE	15.10.13	COPYRIGHT © 2011 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

RELEASED
2016-02-08
ECN 16-518

APPROVED